

ABSTRACT

The object is to provide a drive apparatus for an injection molding machine which can increase the responsiveness of acceleration at the time of start-up of a driven portion. It has a driven portion, a transmission shaft which has a screw shaft portion and an output shaft portion and which is connected to the driven portion so as to be able to rotate with respect thereto and which can advance and retract, a nut which threadingly engages the screw shaft portion, a motor frame which is mounted on a motor mounting frame, a rotor which is mounted on the output shaft portion, and a stator which is mounted on the motor frame. A rotor is mounted on the output shaft portion of the transmission shaft, so the inner diameter of the stator can be reduced by that amount, and the outer diameter of the rotor can be decreased. Accordingly, the inertia of the drive system can be decreased, so the acceleration of the driven portion can be increased, and the responsiveness of acceleration during start-up of the driven portion can be increased. Moreover, rotation can be transmitted to the transmission shaft without using a spline, so sliding resistance due to a spline can be eliminated.